# **2003 Price Index of Operating Costs**

April 25, 2003

#### board members

Chair:

Marvin Markus

**Public Members:** 

Betty Phillips Adams Gale D. Kaufman Elizabeth Lusskin, Esq. Martin A. Zelnik, RA

**Owner Members:** 

Harold A. Lubell, Esq. Steven J. Schleider

**Tenant Members:** 

Adriene L. Holder, Esq. David D. Pagan

#### staff members

**Executive Director:** 

Anita Visser

Research Associates:

Andrew McLaughlin Brian Hoberman

Office Manager:

Leon Klein

Public Information:

**Charmaine Frank** 

PIOC Temp Manager:

**Shirley Alexander** 

# **2003 Price Index Of Operating Costs**

#### what's new

- ✓ The Price Index of Operating Costs for Rent Stabilized Apartment Buildings (PIOC) increased 16.9% this year.
- ✓ Costs in pre-war buildings increased 18.4% and costs in post-war buildings rose 16.2%.
- ✓ The PIOCwas higher than projected mainly because of sharp increases in taxes, fuel prices and insurance rates.
- ✓ The "core" PIOC, which excludes the erratic changes in fuel oil prices,natural gas, and electricity costs,is useful for analyzing inflationary trends. The core rose by 10.6% this year.
- ✓ Fuel oil costs increased 66.9%,the highest rise in this component in PIOC history.
- Real estate taxes rose 14.8%, due to the strong rise in assessments and the increase in the tax rate.
- ✓ Labor Costs rose 3.5%, slightly less than last year's growth.
- The Utilities component increased by 21.7% due primarily to sharp increases in natural gas and electricity costs.
- ✓ Insurance Costs grew by 40.5%,the highest increase in this component since 1986.
- ✓ The Price Index of Operating Costs for Rent Stabilized Apartment Buildings is projected to increase 6.4% next year.

#### Introduction

The Price Index of Operating Costs (PIOC) measures the price change in a market basket of goods and services used in the operation and maintenance of rent stabilized apartment buildings in New York City. The goods and services which make up the market basket were originally selected on the basis of the findings of a study of 1969 expenditure patterns by owners of rent stabilized apartment buildings. Minor changes in the specification of some of these goods and services have been carried out over time to maintain the representativeness of the market basket. The relative importance of the various goods and services in the market basket was updated in 1983 by means of a study of expenditure patterns of owners of rent stabilized apartment buildings.

The PIOC was maintained by the Bureau of Labor Statistics (BLS) from

The Price Index of Operating Costs for Rent Stabilized Apartment Buildings rose ...



1970 to 1981. From 1982 to 1990, the PIOC was prepared by private consulting firms. In 1991, the Rent Guidelines Board (RGB) staff's growing expertise and familiarity made it possible to move the PIOC "in house."

The PIOC measures changes in the cost of purchasing a specified set of goods and services, which must remain constant both in terms of quantity and quality from one year to the next. The need to exclude the effect of any alterations in the quality of services provided requires that very careful specifications of the goods and services priced must be developed and applied. The pricing specifications must permit the measurement of changes in prices paid for carefully defined pricing units with specific terms of sale, such as cash, volume or trade discounts. For certain items, such as real estate taxes, the price paid is determined administratively, and the information is collected from City records.

Changes in the overall PIOC result from changes in the prices of individual goods and services, each weighted by its relative importance as a percentage of total operating and maintenance expenditures. Because the market basket is fixed in the sense that the quantities of goods and services of each kind remain constant, the relative importance of the various goods and services will change when their prices increase either more quickly or more slowly than average. Thus, the relative importance, or weight, attached to each good or service changes from year to year to reflect the different rates of price change among the various index items. The expenditure weights used in the construction of the 2003 Price Index are based upon the 1983 Expenditure Study and revised on the basis of the 1982-2002 measured price changes.

The importance of each index component is shown by its "expenditure weight" (see Appendix 2). The measured 2002-03 price changes in each index component are also presented in this table. The expenditure weights and the 2002-03 price changes are then combined to provide the overall change in the PIOC over the period from 2002-03.

The 1983 Expenditure Study provides a basis for calculating separate sets of expenditure weights for buildings constructed before 1947 and for buildings constructed in 1947 or later (post-1946). Typically, buildings constructed before 1947 incur a lower percentage of operating and maintenance costs for property taxes, but their fuel costs represent a significantly higher percentage of total operating and maintenance costs than do the fuel costs of the post-1946 buildings. The differences between the pre-1947 and post-1946 buildings are submerged when their expenditure patterns are combined in the construction of the overall PIOC. It is nevertheless possible to develop separate price indices for the pre-1947 and post-1946 buildings. In addition, there are separate price indices for gasheated, oil-heated and master-metered buildings. Although the expenditure weights for all rent stabilized buildings and for each of the five subcategories of buildings differ, the price changes are the same for each of the six indices. (See Appendices 2 and 3)

The PIOC consists of nine cost components, each designed to measure changes in a category of costs such as fuel, insurance, utilities, etc. The methodology for each component is described in the final section of this report.

## Summary

This year, the PIOC for rent stabilized apartment buildings increased by 16.9%, eighteen and one-half percentage points above the PIOC percent change from the year before (-1.6% in 2002). The PIOC has been performed since 1969—this is the second highest Price Index increase in the 35-year history of the survey, just under the 17.0% increase found in 1980. Since 1990, in years the Price Index rose rapidly, the survey has generally measured either high fuel price and/or property tax increases. This year is no exception. Fuel prices, insurance costs, utility rates and real estate taxes in rent stabilized buildings all increased in 2003 at either the highest or among the highest rates ever measured in the history of the Price Index. Among the remaining components, Contractor Services and Administrative Costs experienced the highest increases since 1991 and 1990 respectively. Only Labor Costs, Parts and Supplies and Replacement Costs rose at rates more typically seen in recent years. See the adjacent table and Appendix 2 for changes in costs and prices for all rent stabilized apartment buildings from 2002-03.

The "core" PIOC, which excludes the erratic changes in fuel oil, natural gas and electricity costs, is useful for analyzing long-term inflationary trends. The core PIOC rose by 10.6% this year, propelled mainly by tax and insurance increases, and outpaced the growth in the Consumer Price Index (CPI) (2.8%), by almost 8 percentage points.<sup>2</sup>

#### terms and definitions

**Price Index** - the measure of price change in a market basket of goods and services.

Component - categories of goods and services, such as Labor Costs or Taxes, that comprise the market basket of a price index.

Item - representative individual goods and services within a component, such as Pushbroom, Plumbing, Faucet or Roof Repair.

Price Relative - the ratio of current and prior year's prices.

**Expenditure Weight** - the relative importance of the change in costs of different goods and services.

Specification - defined pricing units with specific terms of sale, such as cash, volume or trade discounts

#### apartments

Change In Costs for Rent Stabilized Apartment Buildings, April 2002 to April 2003

All Costs	16.9%
Replacement Costs	1.4%
Parts and Supplies	0.4%
Insurance Costs	40.5%
Administrative Costs	5.4%
Contractor Services	4.8%
Utilities	21.7%
Fuel	66.9%
Labor Costs	3.5%
Taxes	14.8%

### **Price Index Components**

#### **Taxes**



The Tax component of the PIOC is based entirely on real estate taxes. The change in taxes is estimated by comparing aggregate taxes levied on rent stabilized apartment houses in

FY 2002 and FY 2003. The tax data was obtained from the New York City Department of Finance.

Real estate taxes for rent stabilized buildings rose this year by 14.8%. The change in taxes was driven both by the strong rise in assessments and the increase in the property tax rate implemented in January 2003. The tax rate for Class Two properties, the category that contains the vast majority of rent stabilized buildings, dropped slightly from the year before and then rose by a rate of 9.25% for the second and third quarters of FY 2003. Changes in tax exemptions and abatements had little impact on taxes this year.

**Tax Levy** — The total tax levy for all properties in the City (commercial and residential) increased by 15.3%

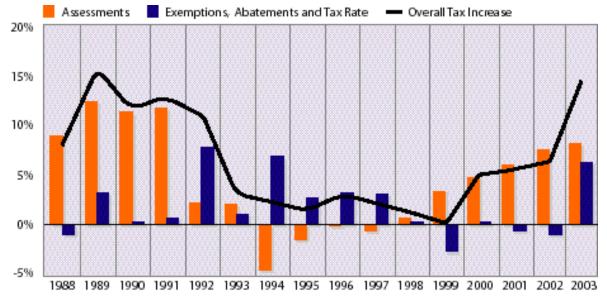
from FY 2002 to FY 2003, due both to the property tax increase and rising assessments. The Class Two property levy rose at about the same rate as the City as a whole, by 15.2%. The distribution of the levy among property classes tends to shift from year to year. In recent years, more of the tax burden has generally fallen on Class Two properties. However, from FY 2002 to FY 2003, the levy share for Class Two properties decreased minimally, by .02 percentage points, to 34.92% of the total tax burden.

Tax Rate — From FY 2002 to FY 2003, the tax rate for Class Two properties decreased for the fifth time in six years, by 2.1% to 10.564. However, an increase in property tax rates of 18.49% was instituted to be effective for the second half of FY 2003. The FY 2003 Class 2 rate of 10.564 was therefore raised by half of the tax rate increase (9.25%) in January resulting in a new annualized rate of 11.541 (a 6.9% increase over the rate for FY 2002).

Assessments — The assessed valuations of rent stabilized buildings rose dramatically from the late 1980s through 1991, increasing 8% or more each year (see graph on the this page). In FY 1992 and FY 1993,

#### Percent Change in Taxes due to Assessments and Exemptions/Abatements/Tax Rate 1988-2003

#### Rising Property Values Increase Billable Assessments for the Sixth Consecutive Year



Source: New York City Department of Finance

the increase in valuations for stabilized buildings slowed to 2% per year. The impact of the recession was finally reflected in tax bills the following two years—valuations dropped 4.7% in FY 1994 and 1.3% in FY 1995. Smaller decreases occurred in the next two years.

For the sixth consecutive year, assessments of rent stabilized buildings increased in FY 2003. Across the City, assessments rose by 8.2%, which is 0.7 percentage points higher than last year's rise of 7.5%. All five boroughs showed increases in assessments, ranging from 6.2% in both Staten Island and Brooklyn to a rise of 9.5% in the Bronx in FY 2003. Assessments rose in Queens by 6.6% and by 8.9% in Manhattan.

Abatements and Exemptions — This year, the number of rent stabilized buildings with abatements declined by 6.2%. However, the average benefit value of the typical tax abatement increased, by 2% from FY 2002 to FY 2003. While the number of properties with tax abatements decreased in every borough except Staten Island from FY 2002 to FY 2003, the average value of abatements increased in Brooklyn, the Bronx and Manhattan. The net impact of the decrease in the number of abatements and the increase in the average abatement value in FY 2003 is a small increase in the tax liability for rent stabilized buildings of approximately 0.16%.

In FY 2003, both the number and value of average tax exemptions increased. Overall, 4.4% more rent stabilized buildings benefited from tax exemptions than in the year before, and the average value of exemptions increased by 7.6% this year. The increase in tax exemptions had a larger impact on the real estate tax component of the PIOC than the change in abatements. For all stabilized properties, the rising number and value of tax exemptions reduced owners' tax bills by about 1.3%. (See Appendices 5 and 6)

#### **Labor Costs**



The Price Index measure of labor costs includes union and non-union salaries and benefits, in addition to Social Security and unemployment insurance. The cost of unionized

labor comprises about two-thirds of the Labor Costs component. The entire Labor Costs component comprises 17% of the overall Price Index.

Labor Costs rose 3.5%, a slightly lower increase than seen in last year's PIOC (4.0%). Unionized wages as a group increased by 3.1%, offsetting the faster growth in non-union pay (4.6%). This is the tenth consecutive year in which the growth in non-union labor pay outpaced union labor wages. In addition, employers saw an increase in the cost of union benefit contributions of 1.3%; down from last year's growth of 1.9%. Of particular interest this year is the change in the cost of unemployment insurance, which is up 14% primarily due to the rise in the New York unemployment rate.

#### **Fuel**



Colder than normal temperatures this winter and rising crude oil prices have raised heating oil prices to near record levels across New York City resulting in an unprecedented 66.9%

increase in the cost of household heating oil. The increases in cost-weighted prices for #2 fuel oil, #4, and #6 were 54%, 81% and 91% respectively.

The PIOC measures fuel oil prices from May to April and then compares them to the same month from the previous year. Decreases occurred in fuel oil prices from May to August of 2002 over the same months from the previous year. Then from September 2002 to April 2003, fuel prices increased each month, the largest increases occurring during the heating season (November through April).

Along with measuring price, the PIOC also takes into account the effect of weather on the demand for fuel oil, especially during the heating season when the large majority of the fuel is burned. The effect of the increase in demand due to this year's colder than normal winter raised the cost of heating with oil by 27.0%. The remainder of the 66.9% increase in fuel costs was primarily due to rising crude oil prices resulting from lower production in the oil producing country of Venezuela and fears of supply interruptions from a war with Iraq. 4

#### **Utilities**



The Utilities component consists primarily of electricity, natural gas, and water and sewer charges. Telephone and steam costs are a small part of the Utilities component. In the case of most Utilities items, changes in costs are measured using the PIOC specifications (i.e. the quantity of electricity, steam, etc. being purchased) and the changes in rate schedules. Water and sewer costs are based on the rate established by the New York City Water Board.

This year, Utilities increased by 21.7%. Gas and electricity costs, which account for roughly 40% of the Utilities component, increased sharply: 40.4% and 42.8% respectively. The double-digit increases in gas and electricity costs were somewhat offset by an increase in water and sewer costs of 6.5%. Water and sewer costs account for more than half of the Utilities component. Steam costs that increased 56.9% and telephone costs that increased 3.2% had little impact on the overall Utilities component.

Unusually cold weather can lead to an increase in the demand for natural gas used for home heating. Due to the colder than normal 2002-03 winter in New York City, demand outpaced supply, which led to an increase in gas prices. In addition, oil prices also rose this past winter. A rise in oil prices often means a rise in natural gas prices because industry can substitute gas for oil placing further demand on supply. Colder weather during the heating season increased the cost of heating with gas by 27.7%. The remainder of the 40.4% increase in gas costs to owners of multi-family buildings was due to a change in price.

This year, the PIOC measured the change in water and sewer charges by using the rate increase set by the New York City Water Board. The increase in water and sewer costs for rent stabilized buildings was 6.5%.

#### **Contractor Services**



The Contractor Services component rose 4.8%, nearly one percentage point higher than last year's increase of 3.9%. The most important items in this component by weight are

repainting and plumbing rates, which comprise twothirds of the Contractor Services component.

For the third consecutive year, plumbing rates increased more than those for repainting. Repainting rates increased by 3.6% compared to last year's growth of 2.0%. Plumbers' rates rose 5.9% similar to last year's growth of

5.7%. Painters, as well as plumbers, reported that an increase in the cost of labor, materials and insurance were the three factors which led to a higher increase in their services this year compared to the previous year.

Every item in the Contractor Services component experienced some rise in prices. Boiler Tube Repair showed the highest increase (10.9%) of any item in this component due primarily to a significant rise in insurance costs. The rises in Refrigerator and Range Repair costs, which were nearly flat, had the smallest increases of any item in this component, 0.1% and 0.2% respectively.

#### **Administrative Costs**



The Administrative Costs component rose 5.4%, higher than the increase found last year (4.6%). Fees paid to management companies, accountants, and attorneys make up nearly this entire component.

A large portion of the growth in the Administrative Costs component can be attributed to a rise in management company fees (6.4%) that comprise over two-thirds of this component. Management fees are often tied to apartment buildings' rental income and are affected by changes in rents and vacancies. This year's growth is higher than last year's (5.6%), indicating that management companies continue to see increased rents and fewer vacancies in the buildings they manage.

Attorney and accounting fees saw similar increases in this year's PIOC. Attorneys' fees rose 3.2% compared to the prior year's slight increase of 0.5%. Accountants' fees rose 2.8% in 2003, slower than last year's rate of 3.9%. Accountants claimed that increases in inflation and the cost in living expenses led to higher rates. Attorneys cited the increase in court fees as the primary reason for raising their rates.

#### **Insurance Costs**



Insurance Costs increased sharply this year by 40.5%, the highest increase in this component since 1986 when costs rose 89%. This was a continuation of the rising insurance

costs seen last year (16.5%). Changes in this component in the fourteen-year period prior to 2002 were still among the most variable in the PIOC, ranging from a decrease of -1.5% to an increase of 5.2%. However, over the history of the Price Index, the Insurance Costs component is subject to very high increases and unlike energy-related items, never has shown commensurately large decreases.

This year, the RGB staff examined the change in insurance costs by borough and by building size. Although increases varied by borough, the more dramatic difference occurred with building size. The cost of insuring a building with 100 or more units increased 80.7% citywide. Buildings with 20-99 units saw a 45.2% increase in insurance costs, while 11-19 unit buildings witnessed a 34.2% increase. Buildings with 10 units or less saw the smallest but still significant increase of 22.8%. When comparing increases in insurance costs by borough, the largest increase was in Queens (49.6%) followed by the Bronx (42.6%),

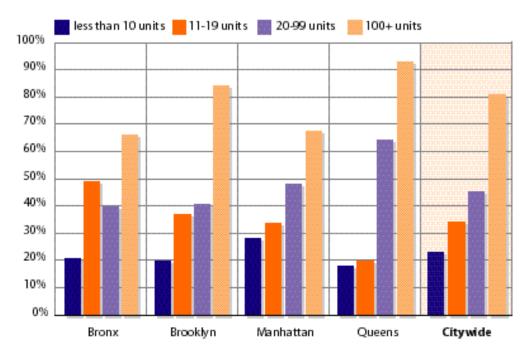
Manhattan (40.4%), Brooklyn (34.6%) and Staten Island (11.2%). The pattern of building size increases citywide is similar in each borough. For a breakdown of insurance costs increases by building size and borough see the graph on this page.

The percentage of owners changing insurance carriers from year to year continued to increase in 2003. Roughly 24% of the building owner responses reported a change in insurance carriers for the surveyed building in the past year. This percentage is up from 21% seen in 2002. Owners who changed carriers experienced a larger rise in costs (43.8%) than owners who remained with the same insurer (32.0%). Those owners who changed the amount of coverage on their buildings, such as increasing the insured value or adding terrorism coverage, saw a 48.0% rise in cost compared to a 30.3% increase for owners who had the same coverage from year to year.

Insurance costs were propelled by the continued poor performance of the stock market over the last 12

#### Change in Insurance Costs by Building Size and Borough 2002-03





Note: Staten Island was not included in this graph due to the lack of any validated surveys returned that included 11-19 and 100+ buildings in this borough.

Source:2003 Price Index of Operating Costs survey

months along with the continued reluctance of insurers to remain in or enter the New York City insurance market after 9/11 for fear of further terrorist attacks. In addition, President Bush signed the Terrorism Risk Insurance Act in November of 2002. This legislation rescinded any state exclusions of terrorism coverage by insurers while at the same time made the federal government share the risk of future losses with insurance companies. Policies including terrorism coverage are extremely expensive which continues to escalate insurance rates.

### **Parts and Supplies**



The Parts and Supplies component accounts for roughly two percent of the entire Price Index. The overall increase in the Parts and Supplies component was 0.4%, slightly lower

than last year's increase of 0.9%. Increases in this component have not exceeded 2.2% since 1992.

### **Replacement Costs**



The Replacement Costs component is even less significant than the Parts and Supplies component, its weight being less than 1/100th of the PIOC. This year there was an overall increase in Replacement Costs of 1.4%.

#### **Rent Stabilized Hotels**

The Hotel Price Index includes separate indices for each of three categories of rent stabilized hotels (due to their dissimilar operating cost profiles) and a general index for all stabilized Hotels. The three categories of hotels are:

1) "traditional" hotels—a multiple dwelling which has amenities such as a front desk, and maid or linen service;
2) Rooming Houses—a multiple dwelling other than a hotel with thirty or fewer sleeping rooms; and, 3) single room occupancy hotels (SRO's)—a multiple dwelling in which one or two persons occupy a single room residing separately and independently of other occupants.

The Price Index for all stabilized Hotels increased 16.0% this year, 17.5 percentage points higher than the

1.5% decrease found the year before. Prices increased in all of the components in the Hotel Index at similar rates to the same components in the Apartment Index. The Price Index for Hotels was just 0.9 percentage points lower overall than the increase in costs measured in the Apartment Price Index. The primary difference between the increase in the Hotel Index and the Apartment Price Index was in the Tax component. The increase in taxes for all types of Hotels was 12.8% overall versus 14.8% in apartment buildings.

There was notable diversity among hotel subgroups in tax expense this year, as real estate taxes increased in "traditional" stabilized hotels by 6.9%, by 17.9% in SRO's, and by 17.0% in Rooming Houses. The lower increase in tax burden found for "traditional" hotels this year was caused by the lower gains in assessed value for Hotels (4.5% compared to 10.0% and 9.2% for SRO's and Rooming Houses), and a discount in tax bills from exemptions (-6.8%), that was much larger than the discount found for the other classes of rent stabilized hotels (-1.1% and -0.3% respectively). (See Appendix 5)

While the increase in Taxes, Fuel and Contractor Services were lower for stabilized Hotels than for apartments, these properties experienced higher increases for labor expense. Labor Costs increased more rapidly in Hotels (4.6%) versus the 3.5% rise in apartments, mainly due to the greater importance of non-union labor in the Hotel Index. Utility costs increased in Hotels by 25.9%, a larger increase than the 21.7% increase for apartments. The difference was due primarily to electricity costs in Hotels, which are weighted more heavily in Hotels than in apartments. Conversely, the rates for Contractor Services did not rise as quickly in Hotels (3.3%) as they did in apartments (4.8%) this year. Because the Contractor Services component is less important in the Hotel Index (accounting for about 10% of the weight) than in the Apartment Index (about 15% of the weight), the lower increase in maintenance rates did not offset the overall Hotel Index significantly. Although Taxes and Fuel increased at lower rates in the Hotel Index, these components are weighted more heavily than they are in the Apartment Index, so the effect of these components on the overall change in prices was similar in both indexes. These changes caused the Price Index for all stabilized Hotels to increase at a similar rate to the Price Index for all stabilized buildings. See the adjacent table for changes in costs and prices for all rent stabilized hotels from 2002-03.

Among the different categories of Hotels, the index for "traditional" hotels increased 12.6%, the index for Rooming Houses and SRO's both increased by 18.7%. (See Appendices 4 and 7)

### **Rent Stabilized Lofts**

The increase in the Loft Index this year was 17.9%, 1 percentage point higher than the increase for apartments. This difference is explained primarily by the fact that Insurance Costs, which increased by 40.5%, are much more important for lofts than for apartments and placed more upward pressure on the Loft Index. See the adjacent table and Appendix 8 for changes in costs and prices for all rent stabilized lofts from 2002-03.

#### The Core PIOC

The Core PIOC (see graph on the next page), which measures long-term local trends by factoring out shifts in fuel costs, gas, and electricity rates, rose 10.6% in 2003. The 10.6% rise in the 2003 Core was 5.4 percentage points higher than last year's Core PIOC projection of 5.2%, mainly due to the unpredictable mid-year increase in property tax rates and insurance costs that rose more rapidly than anticipated. Insurance Costs, Taxes and Administrative Costs showed the most variation between the actual and predicted core increases. All of the remaining changes in the core components in the 2003 projection and the actual 2003 core show agreement within a percentage point.

## PIOC Projections for 2004

Section 26-510 of the Rent Stabilization Law requires the Board to consider the prevailing and projected operating and maintenance costs. Projections for the components of the PIOC are performed to provide the Rent Guidelines Board with an estimate of how much costs are expected to rise in the year following the current Price Index. The PIOC Projection is used in correlation with the old 'traditional' commensurate rent adjustment formula only. Before the new commensurate formulas were devised, the projection was used historically to assist the Board in setting guidelines for tenants choosing two- or three-year leases.

It is important to note that changes in costs and prices after April 2003, the last month covered by this study, will be measured in next year's Price Index. The PIOC Projection is not used in the calculation of the newer 'Net Revenue' and 'CPI-Adjusted NOI' commensurate formulas (see Commensurate Rent Adjustment section below), which calculate one- and two-year guidelines that will compensate owners for the most recent change in costs measured by the Price Index. The PIOC Projection should not be considered in combination with these newer formulas in establishing guidelines.

#### hotels

Change In Costs for Rent Stabilized Hotel Buildings, April 2002 to April 2003

Taxes	12.8%
Labor Costs	4.6%
Fuel	64.9%
Utilities	25.9%
Contractor Services	3.3%
Administrative Costs	5.3%
Insurance Costs	40.5%
Parts and Supplies	0.8%
Replacement Costs	2.2%
All Casts	17.007
All Costs	16.0%

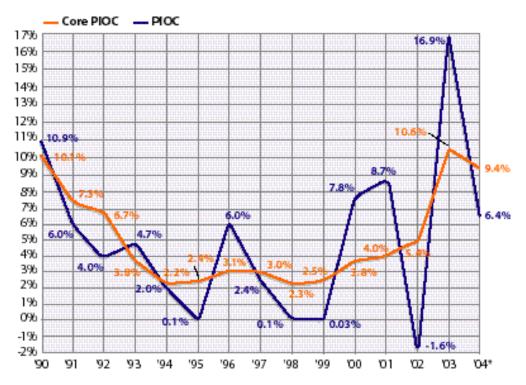
#### lofts

Change In Costs for Rent Stabilized Loft Buildings, April 2002 to April 2003

All Costs	17.9%
Replacement Costs	1.4%
Parts and Supplies	0.4%
Insurance Costs	40.5%
Administrative Costs, Other	5.7%
Administrative Costs,Legal	3.2%
Contractor Services	4.8%
Utilities	20.1%
Fuel	72.8%
Labor Costs	4.4%
Taxes	14.8%

#### Percent Change in the Price Index of Operating Costs and the Core PIOC, 1990-2004





\*Note:The percent change for 2004 was estimated. Source:Price Indices of Operating Costs,1990-2003,PIOCprojection for 2004

Projecting changes in the PIOC has become more challenging in recent years. Energy prices—which affect about one-fifth of the market basket of operating costs measured in the index—have become increasingly volatile. Unpredictable geo-political events and changing weather patterns are some of the forces behind large changes in fuel-related costs (heating fuel, electricity, gas and steam) that have in turn hindered the accuracy of the PIOC projections in recent studies.

This year, operating costs in rent stabilized apartment buildings increased by 16.9% versus last year's projected PIOC increase of 6.4%. The sharp increases in property taxes, fuel, utilities and insurance costs contributed the most to the variance between the 2003 projection and the actual 2003 PIOC.

Due to the unanticipated mid-year property tax increase, taxes rose 14.8% versus the projected 4.6%.

Fuel costs, which had plummeted the year before (-36%) increased by 67% in 2003 versus the expected increase of 18%, a difference of almost 50 percentage points. The major reason fuel prices are hard to predict is that PIOC projection methodology assumes a return to "normal" weather but actual weather patterns are generally warmer or colder than "normal", (see Endnote 3). Since the PIOC year (May-April) 2003 was colder than normal, the actual increase was much higher than the prediction (18%). The actual increase in the 2003 Fuel component was very high (66.9%) due both to increased usage because of the heating season's very cold temperatures and increases in fuel prices that were higher than projected. Rising energy prices and the colder weather also contributed to utility costs increasing by 21.7% instead of the 4.6% increase predicted.

Insurance Costs, another volatile and increasingly unpredictable component, rose 24 percentage points higher than the 16.4% estimate to an increase of 40.5%. The 9/11 terrorist attacks continued to have the effect of raising insurance costs in 2003. Administrative Costs rose about 1.2 percentage points more than predicted, while all the remaining components changed within one percentage point of their predicted levels.

Overall, the PIOC is expected to grow by 6.4% from 2003 to 2004 due to a 16.6% projected increase in Taxes, a 19.7% estimated increase in Insurance Costs, and the projected growth in Contractor Services and Administrative Costs. Labor Costs are projected to increase by 3.8%. This projection includes the wage and benefit increases for 2004 in the tentative agreement announced by the Local 32BJ Bargaining Committee on April 23rd, 2003 and other labor contract increases that have already been ratified for 2004. These increases in cost are expected to be offset by decreases in Fuel (-18.5%) and energy-related utility costs. The overall Utilities component is expected to increase by 1.8% in 2004 because water and sewer rates are expected to rise by 6.5% and will offset the anticipated decreases in electricity and gas charges. The adjacent table shows the predicted changes in the PIOC components for 2004. The core PIOC is projected to rise more rapidly than the overall PIOC, by 9.4%, as the energy-related costs that are predicted to decline sharply are eliminated.

### **Commensurate Rent Adjustment**

Throughout its history, the Rent Guidelines Board has used a formula, known as the commensurate rent adjustment, to help determine annual rent guidelines for rent stabilized apartments. In essence, the "commensurate" combines various data concerning operating costs, revenues, and inflation into a single measure indicating how much rents would have to change for net operating income (NOI) in stabilized buildings to remain constant. The different types of "commensurate" adjustments described below are primarily meant to provide a foundation for discussion concerning prospective guidelines.

In its simplest form, the commensurate rent adjustment is the amount of rent change needed to maintain landlords' current dollar NOI at a constant level. In other words, the formula provides a set of one- and two-year renewal rent increases or guidelines that will compensate owners for the change in prices measured by the PIOC and keep net operating income "whole".

The first commensurate method is called the "Net Revenue" approach. While this formula takes into consideration the types of leases actually signed by tenants, it does NOT adjust landlords' NOI for inflation. The "Net Revenue" formula is presented in two ways, first adjusting for the mix of lease terms and second, adding an assumption for stabilized apartment turnover and the impact of revenue from vacancy increases. Under the "Net Revenue" formula, a guideline that would preserve NOI in the face of this year's 16.9% increase in the PIOC, is 15% for a one-year lease and 20% for a two-year lease. Guidelines using this formula and adding assumptions for the impact of vacancy increases on revenues when apartments experience turnover are 12% for one-year leases and 16% for two-year leases.

#### projections

Projected Change In Costs for Rent Stabilized Apartment Buildings, April 2003 to April 2004

All Projected Costs	6.4%
Replacement Costs	0.9%
Parts and Supplies	0.7%
Insurance Costs	19.7%
Administrative Costs	4.7%
Contractor Services	4.1%
Utilities	1.8%
Fuel	-18.5%
Labor Costs	3.8%
Taxes	16.6%

The second commensurate method considers the mix of lease terms while adjusting NOI upward to reflect general inflation, keeping both O&M and NOI constant. This is commonly called the "CPI-Adjusted NOI" formula. A guideline that would preserve NOI in the face of the 2.8% increase in the Consumer Price Index (see Endnote 2) and the 16.9% increase in the PIOC is 16% for a one-year lease and 23% for a two-year lease. Guidelines using this formula and adding the estimated impact of vacancy increases are 13.5% for one-year leases and 18% for two-year leases.

The original formula that has been in use since the inception of the Rent Guidelines Board, is called the "traditional" commensurate adjustment. The "traditional" commensurate yields 10.4% for a one-year lease and 12.6% for a two-year lease, given the increase in operating costs of 16.9% found in the 2003 PIOC, and the projection of a 6.4% increase next year. 9

As a means of compensating for cost changes, this "traditional" commensurate rent adjustment has two major flaws. First, although the formula is supposed to keep landlords' current dollar income constant, the formula does not consider the mix of one- and two-year lease renewals. Since only about three-fifths of leases are renewed in any given year, with a preponderance of leases having a two-year duration, the formula does not necessarily accurately estimate the amount of income needed to compensate landlords for operating and maintenance (O&M) cost changes.

A second flaw of the "traditional" commensurate formula is that it does not consider the erosion of landlords' income by inflation. By maintaining current dollar NOI at a constant level, adherence to the formula may cause profitability to decline over time. However, such degradation is not an inevitable consequence of using the "traditional" commensurate formula. <sup>10</sup>

All of these methods have their limitations. The "traditional" commensurate formula is artificial and does not consider the impact of lease terms or inflation on landlords' income. The "Net Revenue" formula does not attempt to adjust NOI based on changes in interest rates or deflation of landlord profits. The "CPI-Adjusted NOI" formula inflates the debt service portion of NOI, even though interest rates have been generally falling, rather than rising over recent years. Including a consideration of the amount of income owners receive on vacancy assumes both that vacancy increases are charged and collected, and that turnover rates are constant across the City.

Finally, it is important to note that only the "traditional" commensurate formula uses the PIOC projection and that this projection is not used in conjunction with or as part of the "Net Revenue" and "CPI-Adjusted NOI" formulas. As stated previously, all three formulas attempt to compensate owners for the adjustment in their operating and maintenance costs measured each year in the PIOC. The "Net Revenue" and the "CPI-Adjusted NOI" formulas attempt to compensate owners for the adjustment in O&M costs by using ONLY the known PIOC change in costs (+16.9%). The traditional method differs from the other formulas in that it uses both the PIOC's actual change in costs as well as the PROJECTED change in costs (6.4%). If the change in projected costs, which may not end up being an accurate estimate of owner's costs, is added to the "Net Revenue" and "CPI-Adjusted NOI" formulas, the resulting guidelines will likely over- or under-compensate for the change in costs.

#### commensurates

#### "Net Revenue" Commensurate Adjustment

1-Year Lease	2-Year Lease
15%	20%

#### "Net Revenue" Commensurate Adjustment with Vacancy Increase

1-Year Lease	2-Year Lease		
12%	16%		

#### "CPI-Adjusted NOI" Commensurate Adjustment

1-Year Lease	2-Year Lease		
16%	23%		

#### "CPI-Adjusted NOI" Commensurate Adjustment with Vacancy Increase

1-Year Lease	2-Year Lease
13.5%	18%

#### "Traditional" Commensurate Adjustment

1-Year Lease	2-Year Lease
10.4%	12.6%

Each of these formulae may be best thought of as a starting point for deliberations. The other Rent Guidelines Board annual research reports (e.g. the Mortgage Survey report and the Income and Expense Study) and testimony to the Board can be used to modify the various estimates depending on these other considerations.

### Methodology

#### **Owner Survey**

The Owner Survey gathers information on management fees, insurance, and non-union labor from building managers and owners. Survey questionnaires, accompanied by a letter describing the purpose of the PIOC, were mailed to the owners or managing agents of stabilized buildings.

If the returned questionnaire was not complete, an interviewer contacted the owner/manager and the missing information was gathered. All of the price information given by the owner/managing agent was then confirmed by calling the relevant insurance and management companies and non-union employees.

The sample frame for the Owner Survey included more than 41,000 stabilized buildings registered with the New York State Division of Housing and Community Renewal (DHCR). A random sampling scheme was used to choose 5,100 addresses from this pool for the owner mailing. The number of buildings chosen in each borough was proportional to the share of stabilized buildings in that borough. The "multiple contact" method was used for the fifth consecutive year for the Owner Survey. Three successive mailings were sent at timed intervals to the owner or managing agent of each property selected in the survey sample.

Nearly 20% of the questionnaires mailed out were returned to the RGB, the highest return rate since the RGB staff started conducting the Owners Survey in 1991. A total of 921 returned surveys contained usable information, from which historically high validation counts were reached in quotes of owners' annual insurance costs (807), non-union labor quotes (258) and management fees (129). The number of verified prices in 2002 and 2003 for the Owner Survey is shown in Appendix 1.

#### **Fuel Oil Vendor Survey**

Fuel price information is gathered on a monthly basis via a telephone survey. A monthly survey makes it possible to keep in touch with fuel vendors and to gather the data on a consistent basis (i.e. on the same day of the month for each vendor). Vendors are called each month to minimize the likelihood of misreporting and also to reduce the reporting burden for the companies that do not care to look up a year's worth of prices. The number of fuel quotes gathered this year was similar to last year and is contained in Appendix 1.

To calculate changes in fuel oil costs, monthly price data is weighted using a degree-day formula to account for changes in the weather. The number of Heating Degree Days (see Endnote 3) is a measure of heating requirements.

#### **Real Estate Tax Computations**

The sample of buildings used to compute the 2003 tax price relative was drawn by providing a list of rent stabilized properties registered with DHCR to the Department of Finance. Finance "matched" this list against its records to provide data on assessed value, tax exemptions, and tax abatements for more than 37,000 buildings in FY 2002 and FY 2003.

The Department of Finance data was used to compute a tax bill for each stabilized building in FY 2002 and FY 2003. The change computed for the PIOC is simply the percentage increase in aggregate tax bills for these buildings from FY 2002 to FY 2003.

#### **Vendor Survey**

The Vendor Survey is used to gather price quotes for Contractor Services (e.g. painting), Administrative Costs (e.g. accountant and attorney fees), Parts and Supplies (e.g. mops), and Replacement Costs (e.g. refrigerators). As in prior years, the vendor database was updated by adding new vendors and by deleting those who no longer carry the products or perform the services outlined in the Vendor Survey item specifications. All vendor quotes were obtained over the telephone. The telephone interview procedures used for gathering price quotes were unchanged from prior years. A total of 675

recorded price quotes was gathered. For a description of the items priced and the number of price quotations obtained for each item, refer to Appendix 1.

#### **Water/Sewer Charges**

To measure the change in water and sewer costs for rent stabilized buildings, this year, staff used the Water Board FY 2003 increase of 6.5%. The past four PIOC studies used actual bills from a random sample of properties that were accessed through the New York City Department of Environmental Protection (DEP)'s Customer Information System (CIS). The proportion of buildings billed on a frontage basis, and those billed on a metered basis were determined. The Water Board rate was applied to the frontage properties and actual changes in annual costs were calculated for buildings billed on a metered basis, or, those that switched from frontage to metered billing. Each study found high variability in the analysis of metered billing. Furthermore, a large majority of properties were billed on a frontage basis in each study. The high variability in the metered rate changes caused staff to consider this analysis to be less reliable than using the Water Board rate as a measurement of the change in the universe of rent stabilized property's water and sewer costs.

#### **Other Items**

In addition to the items previously discussed, a number of other pieces of information are needed to complete the PIOC, including labor union contract and benefit information, Social Security rates, unemployment insurance rates, Heating Degree Days, telephone and utility rate schedules. These items are used in computing some of the labor components, changes in utility costs for electricity, gas, steam, and telephone, and the cost-weighted change in fuel prices.

#### **Price Index Projections**

The PIOC Projections are estimated by using data from Federal, state and local agencies, estimates from related industry experts and trend forecasting using three-year or long-term averages.

Taxes were projected by using data from the Department of Finance's tentative assessment roll for FY 2004 and the amended and restated City Council tax fixing resolution to estimate (for Class Two properties) the change in class levy share and assessments, the tax rate and the impact of exemptions and abatements in the coming fiscal year. These estimates produce a projected tax cost for the owners of rental and 4-10 family buildings. Labor costs are projected by analyzing labor contract terms supplied by apartment workers union Local 32-BJ and a ten-year geometric average of all other Labor items. Fuel costs are projected by using data and information from the U.S. Energy Information Administration's (EIA) current "Short-Term Energy Outlook" report, which includes assumptions about changes in usage according to a projected return to the average temperature over the last five years. Utility costs are projected by obtaining rate projections for the coming year from the New York City Water Board and EIA projections. Natural gas rate projections are combined with assumptions about usage if the coming year's weather had the five-year average number of Heating Degree Days. 11

The other components, Administrative Costs, Contractor Services, Insurance Costs, Parts and Supplies, and Replacement Costs are projected by using three-year or ten-year geometric averages of the component price relatives.

## **Acknowledgments**

The Rent Guidelines Board would like to acknowledge the following individuals for their assistance in preparing the Price Index of Operating Costs this year: Dr. James F. Hudson for technical assistance and reviewing methodology; Shirley Alexander for supervising the data collectors for the owner and vendor surveys and Lana Ranger and Charmaine Frank for collecting owner and vendor information.

### **Endnotes**

- 1.The Price Index has resulted in double-digit increases seven times in 35 years of the survey (1969-2003):1971 (13.4%),1974 (15.5%),1979 (10.4%),1980 (17.0%),1981 (14.6%),1990 (10.9%) and 2003 (16.9%).
- 2.The average CPI-U for All Urban Consumers, New York-Northeastern New Jersey for the year from April 2001 to March 2002 (188.2) compared to the average for the year from April 2002 to March 2003

- (193.4) rose by 2.8%. This is the latest available CPI data and is roughly analogous to the 'PIOC year', which for the majority of components compares the most recent point-to-point figures from April to April, monthly cost-weighted figures from May to April, or the two most recent fiscal year bills.
- 3. The May 2002 to April 2003 year was 14% colder than the most recent 5-year average "normal" year, and 28% colder than the year before. "Normal" weather refers to the typical number of Heating Degree Days measured at Central Park,New York City, over a given period. A Heating Degree Day is defined as, for one day, the number of degrees that the average temperature for that day is below 65 degrees Fahrenheit. The most recent five-year average "normal" temperature refers to the total number of average annual Heating Degree Days from "PIOC" years,May 1998 to April 2003 measured in Central Park by the National Weather Service.
- 4."Special Topics:The War's Impact on Gasoline Prices," March 25,2003, U.S.Energy Information Administration, Department of Energy, http://www.eia.doe.gov/emeu/security/esar/qaspricing.html
- 5."Natural Gas Prices Rise as Temps Fall," January, 13,2003,USA TODAY website, http://www.usatoday.com/money/markets/us/2003-01-13-natgas\_x.htm
- 6."Public Information Regarding Water and Wastewater Rates," New York City Water Board, April 2003.
- 7."Terrorism and Insurance," Insurance Information Institute website, http://www.iii.org/media/hottopics/insurance/sept11/
- 8. The following assumptions were used in the computation of the commensurates:(1) the required change in landlord revenue is 61% of the 2003 PIOC increase of 16.9%, or 10.4%. The 61% figure is the most recent ratio of average operating costs to average income in stabilized buildings; (2) for the "CPI-Adjusted NOI" commensurate, the increase in revenue due to the impact of inflation on NOI is 39% times the latest 12-month increase in the CPI ending March 2003 (2.78%) or 1.1%; (3) these lease terms are only illustrative. Other combinations of one- and two-year guidelines could produce the adjustment in revenue; (4) assumptions regarding lease renewals and turnover were derived from the 1999 Housing and Vacancy Survey; (5) for the commensurate formulae including a vacancy assumption, the 18.0% median increase in vacancy leases found in the rent stabilized apartments that reported a vacancy lease in the 2001 Apartment registration file from the Division of Housing and Community Renewal was used.
- 9.The collectability of legally authorized adjustments is assumed. Calculating the "traditional" commensurate rent adjustment requires an assumption about next year's PIOC. In this case, the 6.4% PIOC projection for 2004 is used.
- 10.Whether profits will actually decline depends on the level of inflation, the composition of NOI (i.e. how much is debt service and how much is profit), changes in tax laws, and interest rates.
- 11.Source: "Short-Term Energy Outlook," April 2003. U.S.Energy Information Administration, Department of Energy.

# **Appendix: Price Index of Operating Costs**

# 1. PIOC Sample, Number of Price Quotes per Item, 2002 vs. 2003

Spec	Description	2002	2003	Spec	Description	2002	2003
211	Apartment Value	191	238	701	INSURANCE COSTS	658	807
212	Non-Union Super	127	151				
216	Non-Union Janitor/Porter	71	107	801	Light bulbs	9	7
				802	Light Switch	7	5
	LABOR COSTS	389	496	803	Wet Mop	10	6
				804	Floor Wax	6	7
301	Fuel Oil #2	29	29	805	Paint	15	11
302	Fuel Oil #4	8	7	806	Pushbroom	10	7
303	Fuel Oil #6	6	6	807	Detergent	8	7
				808	Bucket	14	12
	FUEL	43	42	809	Washers	10	11
				810	Linens	10	10
501	Repainting	128	125	811	Pine Disinfectant	7	6
502	Plumbing,Faucet	33	32	812	Window/Glass Cleaner	6	7
503	Plumbing,Stoppage	32	33	813	Switch Plate	11	7
504	Elevator #1	12	12	814	Duplex Receptacle	11	8
505	Elevator #2	12	14	815	Toilet Seat	17	14
506	Elevator #3	11	13	816	Deck Faucet	14	13
507	Burner Repair	18	12				
508	Boiler Repair, Tube	10	11		PARTS & SUPPLIES	165	138
509	Boiler Repair, Weld	6	7				
510	Refrigerator Repair	13	15	901	Refrigerator #1	12	11
511	Range Repair	11	11	902	Refrigerator #2	14	12
512	Roof Repair	23	22	903	Air Conditioner #1	6	6
513	Air Conditioner Repair	11	10	904	Air Conditioner #2	7	5
514	Floor Maint. #1	7	6	905	Floor Runner	13	10
515	Floor Maint. #2	7	6	906	Dishwasher	10	9
516	Floor Maint. #3	7	5	907	Range #1	10	10
518	Linen/Laundry Service	5	5	908	Range #2	10	10
		_		909	Carpet	13	10
	CONTRACTOR SERVICES	346	339	910	Dresser	7	7
				911	Mattress & Box Spring	9	10
601	Management Fees	103	129				
602	Accountant Fees	29	28		REPLACEMENT COSTS	111	100
603	Attorney Fees	21	21				
604	Newspaper Ads	19	20				
605	Agency Fees	5	5				
606	Lease Forms	9	6				
607	Bill Envelopes	12	13				
608	Ledger Paper	8	5				
	ADMINISTRATIVE COSTS	206	227		All Items	1,918	2,049

# 2. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Apartments, 2003

Spec #	Item Description	Expenditure Weights		% Change	Standard Error	Spec #	Item Description	Expenditure Weights		% Change	Standard Error
101	TAXES,FEES,& PERMITS	0.2655	1.1480	14.80%	0.1294	601	Management Fees	0.6924	1.0641	6.41%	0.9412
						602	Accountant Fees	0.1436	1.0278	2.78%	1.2164
201	Payroll,Bronx,All	0.1175	1.0270	2.70%	0.0000	603	Attorney Fees	0.1258	1.0323	3.23%	1.3541
202	Payroll,Other, Union,Supts.	0.1156	1.0318	3.18%	0.0000	604	Newspaper Ads	0.0042	1.0408	4.08%	2.1543
203	Payroll,Other, Union,Other	0.2861	1.0328	3.28%	0.0000	605	Agency Fees	0.0055	1.0354	3.54%	2.0477
204	Payroll, Other, Non-Union, Al	I 0.2934	1.0461	4.61%	0.4729	606	Lease Forms	0.0101	1.0445	4.45%	4.4761
205	Social Security Insurance	0.0466	1.0432	4.32%	0.0000	607	Bill Envelopes	0.0097	1.0390	3.90%	3.6332
206	Unemployment Insurance	0.0069	1.1410	14.10%	0.0000	608	Ledger Paper	0.0086	1.0369	3.69%	3.4144
207	Private Health & Welfare	0.1339	1.0134	1.34%	0.0000		A DAMAUSTD A TIME OOSTS	0.00/0	4.05.40	F 400/	0.4000
	LABOR COSTS	0.1696	1.0345	3.45%	0.1387		ADMINISTRATIVE COSTS	0.0869	1.0540	5.40%	0.6990
						701	INSURANCE COSTS	0.0709	1.4046	40.46%	2.1948
301	Fuel Oil #2	0.6190	1.5419	54.19%	1.4382						
302	Fuel Oil #4	0.1422	1.8109	81.09%	2.1891	801	Light Bulbs	0.0377	1.0111	1.11%	1.1797
303	Fuel Oil #6	0.2388	1.9142	91.42%	2.9052	802	Light Switch	0.0479	1.0067	0.67%	0.7088
						803	Wet Mop	0.0428	1.0000	0.00%	0.0000
	FUEL	0.0756	1.6691	66.91%	1.1708	804	Floor Wax	0.0393	1.0000	0.00%	0.0000
						805	Paint	0.2279	1.0000	0.00%	0.0000
401	Electricity #1,2,500 KWH	0.0105	1.3527	35.27%	0.0000	806	Pushbroom	0.0363	1.0000	0.00%	0.0000
402	Electricity #2,15,000 KWH	0.1332	1.4339	43.39%	0.0000	807	Detergent	0.0332	1.0000	0.00%	0.0000
403	Electricity #3,82,000 KWH	0.0000	1.3545	35.45%	0.0000	808	Bucket	0.0398	1.0000	0.00%	0.0000
404	Gas #1,12,000 therms	0.0047	1.2321	23.21%	0.0000	809	Washers	0.0964	1.0075	0.75%	0.7730
405	Gas #2,65,000 therms	0.0480	1.4047	40.47%	0.0000	811	Pine Disinfectant	0.0476	1.0085	0.85%	0.6843
406	Gas #3,214,000 therms	0.2129	1.4073	40.73%	0.0000	812	Window/Glass Cleaner	0.0503	1.0329	3.29%	2.4267
407	Steam #1,1.2m lbs	0.0149	1.5448	54.48%	0.0000	813	Switch Plate	0.0459	1.0079	0.79%	2.1665
408	Steam #2,2.6m lbs	0.0056	1.6345	63.45%	0.0000	814	Duplex Receptacle	0.0339	1.0000	0.00%	0.0000
409	Telephone	0.0100	1.0319	3.19%	0.0000	815	Toilet Seat	0.1006	1.0025	0.25%	0.2248
410	Water & Sewer	0.5602	1.0650	6.50%	0.0000	816	Deck Faucet	0.1202	1.0000	0.00%	0.0000
	UTILITIES	0.1491	1.2171	21.71%	0.0000		PARTS AND SUPPLIES	0.0210	1.0041	0.41%	0.1872
501	Repainting	0.4032	1.0363	3.63%	0.7702	901	Refrigerator #1	0.0943	1.0233	2.33%	1.3773
502	Plumbing,Faucet	0.1406	1.0553	5.53%	1.2378	902	Refrigerator #2	0.4653	1.0140	1.40%	0.9922
503	Plumbing,Stoppage	0.1268	1.0628	6.28%	1.3401	903	Air Conditioner #1	0.0177	1.0287	2.87%	2.9844
504	Elevator #1,6 fl.,1 e.	0.0566	1.0338	3.38%	1.7959	904	Air Conditioner #2	0.0224	1.0000	0.00%	0.0000
505	Elevator #2,13 fl.,2 e.	0.0373	1.0454	4.54%	1.9886	905	Floor Runner	0.0905	1.0462	4.62%	4.1781
506	Elevator #3,19 fl.,3 e.	0.0211	1.0452	4.52%	1.6173	906	Dishwasher	0.0480	1.0000	0.00%	0.0000
507	Burner Repair	0.0377	1.0928	9.28%	1.8274	907	Range #1	0.0468	1.0076	0.76%	0.5333
508	Boiler Repair, Tube	0.0459	1.1089	10.89%	3.4024	908	Range #2	0.2151	1.0019	0.19%	0.4410
509	Boiler Repair, Weld	0.0333	1.0703	7.03%	3.3008		· ·				
510	Refrigerator Repair	0.0124	1.0014	0.14%	0.1355		REPLACEMENT COSTS	0.0089	1.01414	1.41%	0.6209
511	Range Repair	0.0130	1.0019	0.19%	0.1847						
512	Roof Repair	0.0580	1.0286	2.86%	1.3823						
513	Air Conditioner Repair	0.0086	1.0690	6.90%	3.0204						
514	Floor Maint.#1,Studio	0.0003	1.0075	0.75%	0.7845						
515	Floor Maint.#2,1 Br.	0.0005	1.0186	1.86%	1.2489						
516	Floor Maint.#3,2 Br.	0.0046	1.0132	1.32%	1.3210						
	CONTRACTOR SERVICES	0.1526	1.0481	4.81%	0.4701		ALL ITEMS	1.0000	1.16901	16.90%	0.2065

# 3. Price Relative by Building Type, Apartments, 2003

Spec #'s	Item Description	Pre- 1947	Post- 1946	Gas Heated	Oil Heated	MASTER METERED BLDGS
101	TAXES.FEES.& PERMITS	1.1610	1.1305	1.1480	1.1480	1.1480
201-207	LABOR COSTS	1.0359	1.0329	1.0365	1.0344	1.0381
301-303	FUEL	1.6432	1.7770	1.5433	1.6736	1.5463
401-410	UTILITIES	1.2220	1.2485	1.2904	1.1475	1.2723
501-516	CONTRACTOR SERVICES	1.0486	1.0469	1.0447	1.0491	1.0499
601-608	ADMINISTRATIVE COSTS	1.0517	1.0568	1.0527	1.0541	1.0461
701	INSURANCE COSTS	1.4046	1.4046	1.4046	1.4046	1.4046
801-816	PARTS AND SUPPLIES	1.0041	1.0042	1.0042	1.0041	1.0065
904-908	REPLACEMENT COSTS	1.0136	1.0153	1.0109	1.0150	1.0196
	ALL ITEMS	1.1835	1.1615	1.1543	1.1833	1.1676

# 4. Price Relative by Hotel Type, 2003

Spec				
#	Item Description	Hotel	RH	SRO
101	TAXES,FEES,& PERMITS	1.0685	1.1704	1.1787
205-206,208-216	LABOR COSTS	1.0475	1.0424	1.0456
301-303	FUEL	1.6341	1.5419	1.7890
401-407,409-410	UTILITIES	1.2492	1.2322	1.3051
501-509,511-516,518	CONTRACTOR SERVICES	1.0244	1.0443	1.0521
601-608	ADMINISTRATIVE COSTS	1.0548	1.0480	1.0511
701	INSURANCE COSTS	1.4046	1.4046	1.4046
801-816	PARTS AND SUPPLIES	1.0088	1.0052	1.0054
901-904,907-911	REPLACEMENT COSTS	1.0242	1.0181	1.0177
	ALL ITEMS	1.1261	1.1873	1.1874

# 5. Percentage Change in Real Estate Tax Sample by Borough and Source of Change, Apartments and Hotels, 2003

	% Change Due to Assessments	% Change Due to Exemptions	% Change Due to Abatements	% Change Due to Tax Rates	% Change Due to Interactions	Total % Change
APARTMENTS						
Manhattan Bronx Brooklyn Queens Staten Island	8.88% 9.50% 6.24% 6.58% 6.20%	-1.60% -1.99% -0.74% -0.16% -0.21%	0.05% 0.45% 0.30% 0.32% -0.35%	7.15% 7.66% 7.42% 7.24% 7.36%	0.51% 0.52% 0.38% 0.45% 0.42%	14.99% 16.14% 13.60% 14.44% 13.41%
All apts	8.18%	-1.27%	0.16%	7.25%	0.48%	14.80%
HOTELS						
Hotel SRO RH	4.52% 9.97% 9.16%	-6.76% -1.10% -0.28%	0.00% 0.02% 0.20%	9.36% 8.32% 7.30%	-0.27% 0.67% 0.66%	6.85% 17.87% 17.04%
All hotels	7.40%	-3.54%	0.03%	8.65%	0.24%	12.79%

Note: Totals may not add due to rounding.

# 6. Tax Change by Borough and Community Board, Apartments, 2003

Borough	Community Board	Number of Buildings	Tax Relative	Borough	Community Board	Number of Buildings	Tax Relative	Borough	Community Board	Number of Buildings	Tax Relative
Manhattan	,	12,942	14.42%	(Bronx cont	t.) 7	914	17.44%	(Bklyn.cont.	) 17	602	14.40%
iviainiattai					8	345	12.81%		18	73	12.41%
	1	50	-7.51%		9	284	19.19%				
	2	1223	17.88%		10	183	15.41%	Queens		6,431	13.46%
	3	1599	16.28%		11	287	13.39%		1	1856	14.05%
	4	1014	16.37%		12	374	16.72%		2	861	14.82%
	5	311	10.50%						3	403	15.38%
	6	929	14.26%							380	14.36%
	7	2027	13.67%	Brooklyn		12,694	11.60%		4 5		
	8	2280	16.05%		1	1400	1.4.400/			1179	14.04%
	9	730	16.48%		1	1490	14.43%		6	351	15.89%
	10	760	4.14%		2	691	13.51%		/	402	13.32%
	11	584	14.72%		3	828	13.17%		8	195	12.58%
	12	1417	18.72%		4	1280	16.31%		9	203	15.87%
					5	368	13.75%		10	57	12.07%
Core Man	1.	8,922	14.74%		6	1006	14.07%		11	125	15.36%
		•			7	889	13.67%		12	153	15.14%
Upper Ma	n.	4,020	17.17%		8	988	13.95%		13	54	13.36%
-   -   -   -   -   -   -   -   -   -		·			9	563	14.62%		14	86	10.96%
Bronx		5,001	14.80%		10	822	13.59%				
	1	279	14.22%		11	748	12.42%	Staten Is.		190	8.21%
	2	221	15.65%		12	620	13.57%		1	129	13.27%
	3	270	22.99%		13	179	13.77%		2	35	13.64%
	4	681	17.52%		14	884	13.83%		3	24	13.73%
	5	653	19.63%		15	370	12.55%		<u> </u>	24	13.7370
	6	450	22.06%		16	278	8.90%	Total		37,258	14.80%

Note:No Community Board could be assigned to the following number of buildings for each borough: Manhattan (18),Bronx (60),Brooklyn (15),Queens (126),Staten Island (2). The number of buildings in the category "All" for each borough includes these buildings which could not be assigned a Community Board. Core and Upper Manhattan building totals are defined by block count and cannot be calculated by using Community Board numbers alone.

# 7. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Hotels, 2003

Spec #	Item Description	Expenditure Weights		% Change	Standard Error	Spec #	Item Description	Expenditur Weights	e Price Relative	% Change	Standard Error
101	TAXES,FEES,& PERMITS	0.2733	1.1279	12.79%	1.8507	601	Management Fees	0.6261	1.0641	6.41%	0.9412
						602	Accountant Fees	0.0835	1.0278	2.78%	1.2164
205	Social Security Insurance	0.0556	1.0432	4.32%	0.0000	603	Attorney Fees	0.1316	1.0323	3.23%	1.3541
206	Unemployment Insurance	0.0146	1.1410	14.10%	0.0000	604	Newspaper Ads	0.1001	1.0408	4.08%	2.1543
208	Hotel Private Health/Welfare	0.0378	1.1041	10.41%	0.0000	605	Agency Fees	0.0243	1.0354	3.54%	2.0477
209	Hotel Union Labor	0.3172	1.0400	4.00%	0.0000	606	Lease Forms	0.0114	1.0445	4.45%	4.4761
210	SRO Union Labor	0.0123	1.0400	4.00%	0.0000	607	Bill Envelopes	0.0132	1.0390	3.90%	3.6332
211	Apartment Value	0.1205	1.0360	3.60%	0.7158	608	Ledger Paper	0.0098	1.0369	3.69%	3.4144
212	Non-Union Superintendent	0.3143	1.0446	4.46%	0.6214						
213	Non-Union Maid	0.0000	0.0000	NA	0.0000		ADMINISTRATIVE COSTS	0.0947	1.0531	5.31%	0.6665
214	Non-Union Desk Clerk	0.0000	0.0000	NA	0.0000						
215	Non-Union Maintenance Worke	er 0.0000	0.0000	NA	0.0000	701	INSURANCE COSTS	0.0388	1.4046	40.46%	2.1948
216	Non-Union Janitor/Porter	0.1275	1.0483	4.83%	0.7321						
						801	Light Bulbs	0.0155	1.0111	1.11%	1.1797
	LABOR COSTS	0.1896	1.0461	4.61%	0.2330	802	Light Switch	0.0180	1.0067	0.67%	0.7088
						803	Wet Mop	0.0504	1.0000	0.00%	0.0000
301	Fuel Oil #2	0.7074	1.5419	54.19%	1.4382	804	Floor Wax	0.0489	1.0000	0.00%	0.0000
302	Fuel Oil #4	0.0143	1.8109	81.09%	2.1891	805	Paint	0.1250	1.0000	0.00%	0.0000
303	Fuel Oil #6	0.2782	1.9142	91.42%	2.9052	806	Pushbroom	0.0412	1.0000	0.00%	0.0000
						807	Detergent	0.0444	1.0000	0.00%	0.0000
	FUEL	0.0836	1.6493	64.93%	1.2998	808	Bucket	0.0485	1.0000	0.00%	0.0000
						809	Washers	0.0481	1.0075	0.75%	0.7730
401	Electricity #1,2,500 KWH	0.0717	1.3527	35.27%	0.0000	810	Linens	0.3168	1.0174	1.74%	1.6843
402	Electricity #2,15,000 KWH	0.0770	1.4339	43.39%	0.0000	811	Pine Disinfectant	0.0186	1.0085	0.85%	0.6843
403	Electricity #3,82,000 KWH	0.2546	1.3545	35.45%	0.0000	812	Window/Glass Cleaner	0.0194	1.0329	3.29%	2.4267
404	Gas #1,12,000 therms	0.0500	1.2321	23.21%	0.0000	813	Switch Plate	0.0543	1.0079	0.79%	2.1665
405	Gas #2,65,000 therms	0.0358	1.4047	40.47%	0.0000	814	Duplex Receptacle	0.0408	1.0000	0.00%	0.0000
406	Gas #3,214,000 therms	0.1641	1.4073	40.73%	0.0000	815	Toilet Seat	0.0501	1.0025	0.25%	0.2248
407	Steam #1,1.2m lbs	0.0002	1.5448	54.48%	0.0000	816	Deck Faucet	0.0600	1.0000	0.00%	0.0000
409	Telephone	0.1775	1.0319	3.19%	0.0000						
410	Water & Sewer	0.1691	1.0650	6.50%	0.0000		PARTS AND SUPPLIES	0.0550	1.0075	0.75%	0.5504
	UTILITIES	0.1451	1.2586	25.86%	0.0000	901	Refrigerator #1	0.0196	1.0233	2.33%	1.3773
						902	Refrigerator #2	0.0961	1.0140	1.40%	0.9922
501	Repainting	0.2142	1.0363	3.63%	0.7702	903	Air Conditioner #1	0.0613	1.0287	2.87%	2.9844
502	Plumbing,Faucet	0.0848	1.0553	5.53%	1.2378	904	Air Conditioner #2	0.0734	1.0000	0.00%	0.0000
503	Plumbing,Stoppage	0.0810	1.0628	6.28%	1.3401	907	Range #1	0.0086	1.0076	0.76%	0.5333
504	Elevator #1,6 fl.,1 e.	0.0370	1.0338	3.38%	1.7959	908	Range #2	0.0403	1.0019	0.19%	0.4410
505	Elevator #2,13 fl.,2 e.	0.0335	1.0454	4.54%	1.9886	909	Carpet	0.3472	1.0083	0.83%	0.8057
506	Elevator #3,19 fl.,3 e.	0.0311	1.0452	4.52%	1.6173	910	Dresser	0.1854	1.0740	7.40%	4.0750
507	Burner Repair	0.0263	1.0928	9.28%	1.8274	911	Mattress & Box Spring	0.1682	1.0101	1.01%	1.0000
508	Boiler Repair, Tube	0.0288	1.1089	10.89%	3.4024						
509	Boiler Repair, Weld	0.0247	1.0703	7.03%	0.1355		REPLACEMENT COSTS	0.0229	1.0220	2.20%	0.8491
511	Range Repair	0.1454	1.0019	0.19%	0.1847						
512	Roof Repair	0.0250	1.0286	2.86%	1.3823						
513	Air Conditioner Repair	0.0424	1.0690	6.90%	3.0204						
514	Floor Maint.#1,Studio	0.0009	1.0075	0.75%	0.7845						
515	Floor Maint.#2,1 Br.	0.0019	1.0186	1.86%	1.2489						
516	Floor Maint.#3,2 Br.	0.0169	1.0132	1.32%	1.3210						
518	Linen/Laundry Service	0.2061	1.0000	0.00%	0.0000						
	CONTRACTOR SERVICES	0.0971	1.0332	3.32%	0.3144		ALL ITEMS	1.0000	1.1604	16.04%	0.5320

# 8. Expenditure Weights and Price Relatives, Lofts, 2003

Spec #	Item Description	Weights	Price Relative	Spec #	Item Description	Weights	Price Relative
π	item Description	vveignts	Relative	π	item bescription	vveigitts	Kelative
101	TAXES	0.2548	1.1480		ADMINISTRATIVE COSTS,LEGAL	0.1058	1.0323
201	Payroll,Bronx,All	0.0000	1.0270	601	Management Fees	0.8007	1.0641
202	Payroll, Other, Union, Supts.	0.2842	1.0318	602	Accountant Fees	0.1534	1.0278
203	Payroll,Other, Union,Other	0.0000	1.0328	604	Newspaper Ads	0.0052	1.0408
204	Payroll,Other, Non-Union,All	0.5491	1.0461	605	Agency Fees	0.0067	1.0354
205	Social Security Insurance	0.0453	1.0432	606	Lease Forms	0.0110	1.0445
206	Unemployment Insurance	0.0076	1.1410	607	Bill Envelopes	0.0125	1.0390
207	Private Health & Welfare	0.1138	1.0134	608	Ledger Paper	0.0107	1.0369
	LABOR COSTS	0.1121	1.0442		ADMINISTRATIVE COSTS, OTHER	0.1061	1.0574
301	Fuel Oil #2	0.3484	1.5419	701	INSURANCE COSTS	0.1723	1.4046
302	Fuel Oil #4	0.5430	1.8109				
303	Fuel Oil #6	0.1086	1.9142	801	Light Bulbs	0.0377	1.0111
				802	Light Switch	0.0479	1.0067
	FUEL	0.0516	1.7284	803	Wet Mop	0.0428	1.0000
				804	Floor Wax	0.0394	1.0000
401	Electricity #1,2,500 KWH	0.0114	1.3527	805	Paint	0.2279	1.0000
402	Electricity #2,15,000 KWH	0.1453	1.4339	806	Pushbroom	0.0363	1.0000
403	Electricity #3,82,000 KWH	0.0000	1.3545	807	Detergent	0.0333	1.0000
404	Gas #1,12,000 therms	0.0051	1.2321	808	Bucket	0.0398	1.0000
405	Gas #2,65,000 therms	0.0519	1.4047	809	Washers	0.0965	1.0075
406	Gas #3,214,000 therms	0.1467	1.4073	811	Pine Disinfectant	0.0476	1.0085
407	Steam #1,1.2m lbs	0.0161	1.5448	812	Window/Glass Cleaner	0.0503	1.0329
408	Steam #2,2.6m lbs	0.0060	1.6345	813	Switch Plate	0.0459	1.0079
409	Telephone	0.0108	1.0319	814	Duplex Receptacle	0.0340	1.0000
410	Water & Sewer - Frontage	0.6068	1.0650	815	Toilet Seat	0.1006	1.0025
				816	Deck Faucet	0.1203	1.0000
	UTILITIES	0.0760	1.2013		PARTS AND SUPPLIES	0.0220	1.0041
501	Repainting	0.4031	1.0363		7,111071112 0011 2120	0.0220	
502	Plumbing,Faucet	0.1406	1.0553	901	Refrigerator #1	0.0943	1.0233
503	Plumbing, Stoppage	0.1269	1.0628	902	Refrigerator #2	0.4653	1.0140
504	Elevator #1,6 fl.,1 e.	0.0566	1.0338	903	Air Conditioner #1	0.0177	1.0287
505	Elevator #2,13 fl.,2 e.	0.0373	1.0454	904	Air Conditioner #2	0.0223	1.0000
506	Elevator #3,19 fl.,3 e.	0.0211	1.0452	905	Floor Runner	0.0905	1.0462
507	Burner Repair	0.0377	1.0928	906	Dishwasher	0.0480	1.0000
508	Boiler Repair, Tube	0.0459	1.1089	907	Range #1	0.0467	1.0076
509	Boiler Repair, Weld	0.0334	1.0703	908	Range #2	0.2152	1.0019
510	Refrigerator Repair	0.0124	1.0014	,	· 3- ·· –		
511	Range Repair	0.0130	1.0019		REPLACEMENT COSTS	0.0173	1.0141
512	Roof Repair	0.0580	1.0286				
513	Air Conditioner Repair	0.0086	1.0690				
514	Floor Maint.#1,Studio	0.0003	1.0075				
515	Floor Maint.#2,1 Br.	0.0005	1.0186				
516	Floor Maint.#3,2 Br.	0.0047	1.0132				
	CONTRACTOR SERVICES	0.0821	1.0481		ALL ITEMS	1.0000	1.1790